## Return to Equipment Evaluations

# **63-09 PrepStart Air Abrasion Unit (Project 00-27)** (6-01)

The PrepStart (previously known as the PrepStar) is a tabletop air abrasion unit said to offer the performance and control of larger air abrasion units at a lower cost. The PrepStart is powered by the dental unit air supply (80 psi recommended, 60 psi minimally required) via the same type of port as that used by the Danville Microetcher. It is said to offer 3-stage air filtration, adjustable abrasive flow, adjustable pressure control, and can use either 27- or 50-micron aluminum oxide powder. If higher cutting pressure is desired, Danville Engineering offers the optional PowerPlus Air Booster that is purported



to boost dental unit air pressure up to 135 psi without the requirement for an additional compressor. The PowerPlus Air Booster is said to increase air pressure by using an internal, air-powered compressor that does not require electricity.

#### Manufacturer:

Danville Engineering, Inc. 2021 Omega Road San Ramon, CA 94583-1203 (800) 827-7940 (925) 838-7940 (925) 838-0944 FAX www.daneng.com

## **Suggested Retail Price:**

\$1995 PrepStart Air Abrasion System, includes:

- PrepStart Air Abrasion Unit
- 2 nozzles
- 2 handpieces
- 1 container 50-micron alumina (one pound)
- 1 container 27-micron alumina (one pound)
- owner's manual
- 2 pairs of safety glasses
- training video

\$795 PowerPlus Air Booster

**Government Price:** Currently, no government prices have been established.

#### **ADVANTAGES:**

- + As efficient as compressor-powered air abrasion units.
- + Considerably less expensive than compressor-powered air abrasion units.
- + Compact in size.
- + Easy to connect/disconnect and transport within dental clinics.
- + Intelligent layout and unit design.
- + Easy to operate without an excessive learning curve.
- + Optional PowerPlus Air Booster increases air pressure and unit efficiency without requiring electrical power.
- + Manufacturer's instructions are complete and easy to understand.
- + Can be adequately barrier protected.
- + Compatible with both 27- and 50-micron alumina powder.
- + One-year warranty.

### **DISADVANTAGES:**

- Anesthesia is still required for preparations involving deeper dentin.
- As with all air abrasion units, alumina powder overspray control is problematic when using clinic high volume evacuation alone.
- Alumina powder must be purchased from manufacturer to maintain warranty.

# **SUMMARY AND CONCLUSIONS:**

The PrepStart is a tabletop air abrasion unit that derives its power from the dental unit compressed air supply. The PowerPlus Air Booster is an auxiliary boosting unit that increases dental unit air pressure, which increases the PrepStart's efficiency. Clinical evaluators were impressed with the PrepStart's performance, noting that it was just as efficient as compressor-powered air abrasion units. It is also compact in size, easily transported, functions well without clogging, and does not have a steep learning curve. The PrepStart is considerably less expensive than compressor-powered air abrasion units. Due to its efficiency, ease of function, and cost, the **PrepStart Air Abrasion System** is rated **Recommended** for use by the federal dental services.